RALEIGH AMATEUR RADIO SOCIETY
RARS
WORLDWIDE FRIENDSHIP

May - 1970
Issue # 8

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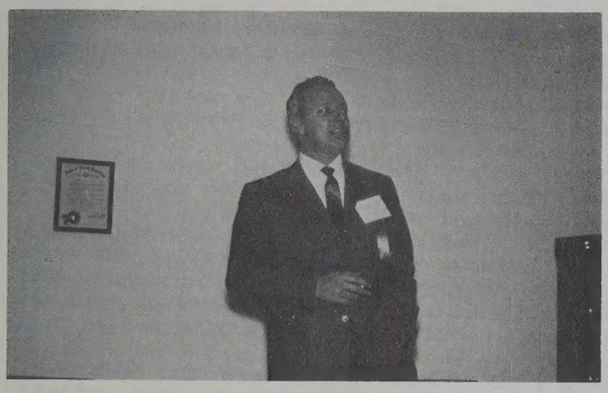
"Raleigh Amateur Radio Society News"

MEET THE PRESIDENT



The President-elect of RARS for the coming two years is Ed Alderman, WA4PEN. Ed, his wife, Nola, and the two boys reside at 3101 Julian Drive in Raleigh. Donnie, the youngest harmonic, recently received his ticket as WN4LFY and is active in RARS. Hailing originally from Leominister, Massachusetts, Ed taught electronics in the Army Air Force during WWII. After the war, he came to Greensboro where he taught in the public schools and from there he came to Raleigh with the Department of Public Instruction. At the present time, Ed is the Education Director for the Durham City Schools. He was first licensed as a technician in 1963 and is an avid six-and two-meter man. Ed was active in Navy MARS from his home QTH for a number of years. A skillful builder, Ed's basement is so full of machine tools, surplus, and home-brewed radio equipment, that the most one can say about it is "WOW." Ed is also active in a number of civic and social organizations around Raleigh. Characterized by friendliness and a quick wit, Ed can be found most any evening involved in the local rag chew on 146.94 MHz unless he is sidelined by a new project, or a frozen pizza...(His only weakness).

Constantly working behind the scene, to improve the club and help his fellow hams, RARS is indeed fortunate to have such a fine President.

WA4OTA

ARRL APPROVES DIVISION CONVENTION

The American Radio Relay League has approved the Roanoke Division Convention for October 31, 1970, in Raleigh, N.C. at the Hilton Inn. There will be commercial exhibits, technical sessions, traffic meetings, DX forums and a QCWA get-together. Also, there will be a Saturday night banquet, programmes for the ladies and many more carefully-planned features and events to make this a fine convention. The convention is sponsored by the Raleigh Amateur Radio Society. Watch for more details in the RARS News, and "QST."

NEXT F C C EXAMS Winston Salem May 6/7 1970

NEXT MEETING

The next monthly meeting of the RARS will be held Wednesday evening, May 6th at 7:30 p.m. The meeting will be at the Civil Defense Headquarters, in the basement of the North Carolina State Government - Administrative Building on 116 West Jones Street. Ample parking is available behind the building. Please enter through the back door. Everybody is welcome.

RARS MEETING DATES

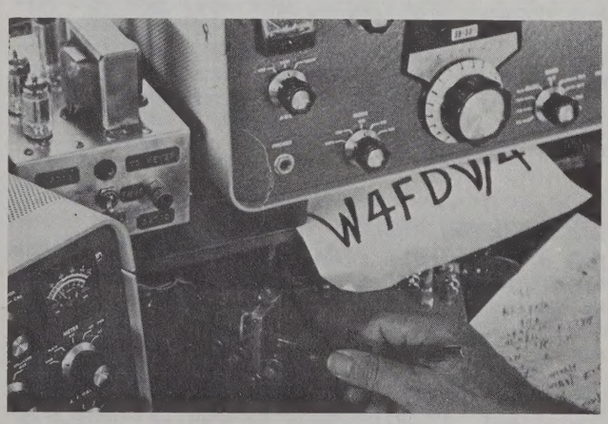
The Raleigh Amateur Radio Society holds its meetings on the first Wednesday of each month except for special occasions. So far, there has only been one meeting that had a different date, so if you are a visitor in Raleigh on a first Wednesday, we would be glad to have you join us for an enjoyable evening. We usually have about 40 to 50, or more, persons at each meeting, so come and have a good time.

FIELD DAY NEWS

A Field Day meeting was held April 1 before the regular RARS meeting, and present were the Band-Captains and Co-Captains. Band-Captains were given pamphlets which included all the information compiled from the Field Day questionaires, returned by our interested members. Although many questionaires were received, less than one-third are accounted for. Our Captains and Co-Captains will be calling on you for your help.

Tom Martin, K4CQJ

REMEMBER 1969 FIELD DAY



RADIO AMATEURS CAN HELP COUNTY CIVIL DEFENSE

A question asked quite often by radio amateurs is, "What can I do to assist the Civil Defense Director in developing an Emergency Preparedness Program in the county in which I live?"

Perhaps a review of the County Civil Defense Directors Communications requirements will help to answer this question. An emergency of any type, whether large or small, that occurs in a county will require the efforts of all or several of the emergency-oriented organizations available.

The task of coordinating the efforts & activities of the emergency organizations involved is one that could be (& generally is) carried out by the County Civil Defense Director. To do this effectively, he must have access to a communications system that will provide adequate communication support. At this point, proper questions could be - what kind of a system? What is considered adequate? The system should consist of all means available within the county. Some examples that are usually available are: Commercial telephone, public - safety radio systems, R A C E S Radio, Citizens - Band Radio, and Civil Air Patrol Radio. Now as to the next question - What is considered adequate? A precise answer is almost impossible for several reasons. First, in many emergencies such as natural disasters and large fires, elements of existing systems could be damaged. Second, if there was no system damage, traffic overload would present a problem. In either case one could reasonably expect a lack of adequate communications for some period of time during an emergency. This is where amateur radio with its inherent flexibility could play a major role in a county. The technical know-how of the licensed radio amateurs, plus the several bands of operating frequencies available, make a combination that provides flexibility which cannot be matched in the communications field.

Each county has been assigned a ten, six and two-meter frequency from the segments of the amateur bands that have been allocated for Radio Amateur Civil Emergency Service, (RACES), use. Radio amateurs can render a valuable service to their communities, by helping the county Civil Defense Director develop county radio networks on these frequencies. Once established, these VHF networks can provide a vital link in the County Emergency Communications System.

North Carolina Civil Defense Headquarters

AMATEUR POPULATION AT ALL-TIME HIGH

Official figures just released by FCC show the total number of licensed amateurs at 265,234, as of March 1, 1970, the highest number in history and 6,000 above last year at the same time. Extra-Class licenses now stand at 10,014 and Advanced-Class licenses number 50,736. There are now 95,394 Generals, 32,730 Conditionals, and 53,666 Technicians. Novices number 22,694. Generals, Techs, and Conditionals are down somewhat from a year ago; all other classes are up.

From the W4KFC newsletter

NEW ADVANCED LICENSES BY RARS MEMBERS

Ron McCann, WB4OZL, has now received his Advanced-Class license. Also we are happy to report our Field Day chairman, Tom Martin, K4CQJ, has just received his Advanced license. Congratulations to you both. This newsletter has yet to report a new Extra-Class license. Will you be the first?

QRM FROM THE EDITOR

Had a phone call from Norm Ramge, with the Wake County Civil Defense. He wants to work with the Raleigh Amateur Radio Society in setting up CD communications for Wake County. He is very interested in the RARS 2-meter FM projects, as this will be very good for emergency communications. RARS President, El Alderman, WA4PEN, stated that the club should be able to be of much service to Wake County. With our association with the N. C. Civil Defense headquarters in Raleigh, and now the Wake County CD, we have a great opportunity to fulfill our existence as per FCC regulation part 97.1 (a); "Recognition and enhancement of the value of amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications."

Some have asked how big our circulation is. At least one net uses the RARS newsletter in North and South Carolina, and the N. C. Civil Defense distributes copies to their people. At present, there are 500 copies printed a month and we only have around 50 left to pass out at club meetings. If your club is interested in using this newsletter for your news and meeting announcements, postage is the only charge for bulk mailing to the club. Then, the club can mail them to their members. Write for more information.

In the April "QST", Sweepstakes results show that Roanoke Division Director, Vic Clark, W4KFC, led the division on phone and CW. He scored over 100,000 points on each mode, and was one of only six to work all 75 ARRL sections on each mode. That's an active director. Congratulations, Vic.

Dave, W4YDY

SICK-IN

WA4PEN (lost in Brent Woods again): Thank goodness (SIC): I've been lost for 2 days. Am I glad to see you!
WA4ZNA (unshaven): What are you so glad about? I've been lost for a week.

W4CQJ: Hey, I'm surprised you got that check from your OM. I thot he cut off your allowance and went to Florida.
WN4MLI: That's right, but I telephoned him long distance and asked for a loan. He said it was the first time I had ever called him without making it collect. He was so touched he said I could have the Collins S-line complete.
W4CQJ: FB. Must have made the OM happy.
WN4MLI: Yes, that it did. I just didn't have the heart to tell him I was phoning him from his office.

W4CQJ: 73.

W4WWD: Hey, fella, "A. Ratte" won't look right on your FB shiney new nametag I got for you for just $ 1.25.
WN4ZZN: Cain't do nothin' about that. My first name is Adam.

FM COMMUNICATION COMMITTEE

Lengthy QSO's at the ZNA ranch, Wed. nite, April 8th portend a gung-ho attack on the FM repeater campaign for RARS in the near future. Our cheerful, loyal prexy generously donated his basement, antenna farm, hi-fi record player, refrigerator (workers have to eat), and his 6M operating time, so as to be able to man the 24-hour watches on weekends. He's really great, fellas. Others have been designated to study a systems approach to the repeater engineering problem, including fabrication of a COR, timer, cavity resonator, antenna, and a duplexer or diplexer. Stu will study the frequency spectrum for MUF's and the absentee Tom (busy w/ the YL equals XYL equation) was unanimously voted the best qualified absentee to study the legal aspects of anything illegal we may do. So it's RARS - FM on the move!
Bert, W4FMN

FOR SALE

BC-610 plate transformer, 2500 volts-$50.00
Contact Jim Johnson, WA4JUG.

FOR SALE

Must sell rig for school expenses. HT-37, & HQ-110 receiver with 6 & 2-meter converters $ 250.00. See Bob Corns, K4MC for equipment and details.

RARS COMMITTEE CHAIRMEN

Membership, Bob Corns, K4MC
Publicity, Tom Alexander, WA4OTA
Field Day, Tom Martin, K4CQJ
Technical and FM, Stu Meyer, W2GHK/4
Novice Training, Bob Corns, K4MC
Upgrade Training, Bob Johnson, W4CQJ
Name Tags, John Fried, W4WWD

MINI-TECHNICAL REVIEW

April QST features a simple receiver preamp built with parts and drawings carefully done complete to include Catalog Numbers, an article on radiation patterns of V dipoles & its recent equipment section describes the ORD DK-1 digital keyer. A miniature ham antenna farm, VLF activity, and Sweepstakes results are combined with K4CIA's Jan. CD bit and the new FCC FM repeater rules in effect and proposed, to round out the usual FB QSO wid Q St.

March CQ missing reveille, per usual, described the 1st of 2-part article on safe erection of the H-Gain TH6DXX antenna, an all-transistor hearing aid (receiver, that is), tube preamp (late again), modern type of remote tuning (look, no gears or cranks) and an encyclopedic coverage of mikes.

April HAM has its usual no eggs but excellent collection of goodies. An interesting use of op amps in a combined current amplifier with bipolar output, lo freq. amplifier curve tracer that can be used for hi-fi is the first intrigue. A 2-gallon linear for 2M and an electronic thermometer are thrown in with an RFA for 432 MHz. Another 599 issue winds up with a 24-hour digital electronic clock and lo power dummy load, with RF wattmeter.

April's 73 is devoted mainly to FM repeating. FCC laws are discussed and FB airings of carrier-operated repeaters and relays are displayed. Other bits are mobile FM antennas, beryllium (like arsenic yet!) cheap SCs for the ham (thas' us), gilding old meters, and using meggers with antennas. A real treat is the directory of open repeaters active in the U.S. All this makes 73 a good buy.

May Radio-Electronics is good news for the dabbler: 10 EC oscillator circuits in kits using simple logic and switching. A more sophisticated FM tuner is brought out for the OM. The continuing series on useful tools is present, as is a timer for the darkroom (come back YLs). The issue closes with its typically fine array of stuff to buy from all manner of merchants.

March IEEE Spectrum gives us taxpayers a glimpse of the ballistic missile defense radars and a truly intriguing article on the state-of-the-art in underground power transmission. (Save for CP&L). Then the IEEE flies off to keep us glued to the chair as we investigate infrared and microwave commo by---moths. Under new products, a neat little glow lamp glows not only for ON and OFF but to switch small signals and trigger flashtubes. The issue QRTs with a comprehensive listing of mucho de manufacturos. Grab those missing QTH's.

April 6th Electronic News has a timely bugle on equipment prepared for the NAB (National Association of Broadcasters) convention in Chicago. BC gear from GE, RCA, and others are described briefly and show the strong trend toward computerization. Even these days, an electronic ratings reader developed for Cable TV use is an eye - opener. (Is Smothers around?) Promises to be the thing in the 70's. As long as we get to watch Gunsmoke, us hams will renew. Altho this blurb is primarily business-oriented, these two articles are believed worth the affluent ham's perusal. Non - affluent can borrow a copy at the library or the local President's lounge.

Bert, W4FMN

ANSWERS TO QUIZ

Applied voltage is 125.8V; branch currents are 166.7 ma, 203 ma, and 629 ma - quote Kirchhoff, chop.

TODAY'S QUIZ

A loudspeaker with an impedance of 4 ohms is worked into a plate circuit, which has a Z of 4000 ohms. What is the Z ratio of an output transformer used to match plate to speaker, and what is the turns ratio?

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YL-XYL PROGRAMMES
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ROANOKE DIVISION ARRL CONVENTION COMMITTEE CHAIRMEN

Housing and Meals, Bob Corns, K4MC
Registration, John Fried, W4WWD
Publicity and Publications, Tom Alexander, WA4OTA
Bob Workman, WA4ZZN
Program, Presentations & Sessions, Lee Johnson, WA4ZNA
Exhibits, Prizes & Advertisers, Stu Meyer, W2GHK/4
Finance, Bill McDowell, K4CIA
MARS Coordinator, Bert Bailey, W4FMN

CAROLINAS TRAFFIC NET, 3573 KHz

6:45 and 10:00 PM

I thought the last bulletin was fine & look forward for many more like it. Enjoyed especially the article on CD (Civil Defense.. that is) and the "MINI - TECHNICAL REVIEW."

N.C. Route Manager retires...
Your current Route Manager, W4IRE, the undersigned, is stepping aside for the present and will be minimally active in the nets for the next few years. Activities here, including raising the kids...2, 4 and 7 years old, are getting into high gear, and there are some projects to be completed, which I have been saving for several years.

Per former agreement with the S.C.SCM W4PED the "CN" management will pass to WA4OWY.. S.C. Route Manager for the next half - year period. So, until the end of the year, the Net will be managed by WA4OWY and WB4MLI (early session) and by WB4ETF and WB4GHK (late session), as far as current information has the story.

Whoever picks up the Route Manager Title can work with these gentlemen to arrange things to their mutual satisfaction.

It has been an enjoyable and busy assignment and I wouldn't mind picking it up again some day in the future. Thanks to all for your cooperation and hard work.....Keep it up.

The NCN's brush with the FCC (Dec.10, 1969) has reverberated up and down the eastern seaboard. Have had comments from Virginia & Florida.

RTTY TRAFFIC NETS are not too plentiful around the country, but with the amount of RTTY gear now in operation, would it be possible to stir up some activity in the Roanoke Division, at least trunk-line activity? I have mentioned this a number of times in QSO's which raised interested comments, but have heard nothing further. The use of 80 and 40 meters is a possibility but those VHF bands are also ripe for this sort of use - AFSK combined with the TT/L terminal unit can do great things on 2 meters or 6 meters (beware channel 2!) 73 for now.

John C. Huffman, W4IRE

CAROLINAS NET

March Report

Note: 1 QNS missing

Total Sessions	30/31
Total Checkins	182
Average QNI	6
Total Net Time	583
Average Net Time	16.1
Different Stations	44
Total Traffic	78
Average Traffic	2.6
Message Rate	.16

For the person who forgot to give me his QNS report, I leave you this curse:May the next time you are net control, I hope W4EVN checks in with 48 pieces of traffic and asks to be excused at 7:00 o'clock.

I would like everyone to notice that our net is slipping away. All of our totals went down. They are even lower this month than they were the last half of January.

By the time you read this,the LO meeting in Greensboro will be over and W4IRE & myself will have met face - to - face for the first time. (That's bound to be a shock for both of us!)

WB4MQC has finally gotten up enough guts to get back on the net. I suppose only so he and W4EVN could team up on me during our bull sessions after the net. (They are both Lids).

Maybe somebody could tell me this: What the heck is that station up about 2 Kc from the net frequency who is always handling traffic and calls itself YVP? He has a rotten fist. Maybe its WB4MQC with his keyer???????

Enough said for this time. Keep those cards and letters coming. See you all on CNE and CNL.

Carl, WB4MLI

This Bulletin Printed Courtesy of Aerotron, Inc.

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